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UNDER THE EDITORIAL DIRECTION OF

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Volume XXI **MAY TENTH** **Number 9**

Editorial Department.

Dr. E. H. Gregory a Guest of Honor.

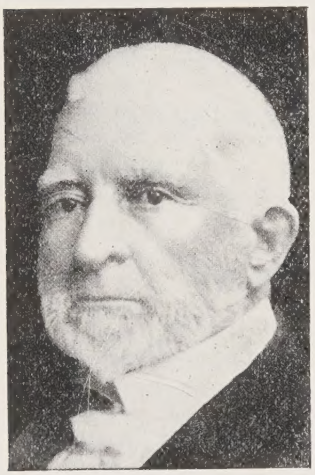
THE BANQUET given to Elisha Hall Gregory, M.D., LL.D., under the auspices of "The St. Louis Medical Society of Missouri," commemorating his fiftieth anniversary as a teacher of medicine, at the Planters Hotel, on Thursday evening, April 17th, 1902, was an event of unusual importance and significance. An event which aside from its magnificence was of inestimable historical value to the profession in the great Mississippi Valley, as marking the growth and development of medicine; the advancement of civilization, and last but not least, the growth of that high and noble professional sentiment—fraternalism and willingness of the profession to do honor to character as the crowning glory of professional success. This was a great event, first, to Dr. Gregory, who beginning his career as a teacher of medicine in St. Louis, has through the successive years—fifty in all—worked for the honor and glory of his profession. He began in 1852 as a demonstrator of Anatomy, becoming adjunct professor of surgery in 1864, professor of surgery 1867, and since then has filled this chair with honor and renown. Dr. Gregory has always stood for what was best in the profession, both in its traditions and its practices; always a scholar, always a gentleman, and always a noble examplar to the young man in medicine.

Active in medical society work he received all of the great honors which can befall a man in this country, viz., President of his local medical society, "The St. Louis Medical Society of Missouri;" next president of his own State society, the Missouri State Medical Association; next president of his own National society, the American Medical Association.

The young man who was fortunate enough to be present at this banquet enjoyed an opportunity to witness what certainly is the triumph of all professional success—the honoring of character The crown of life is character, without it all of the professional attainments of Gregory would be as naught measured by the true standard of success in life.

It is the character and make-up of such a man which gives quality to the quantity of his professional work.

Gregory at the close of his fifty years as a teacher stands before the profession as a great examplar of success, and to the young men in medicine an inspiration to achieve, to bring about results and be all that such nobility of character can make of a man. Gregory answers the question confronting the recent graduate in medicine, How is success to come to me? by the example of his own life, which shows that in doing all the good he can, in all the ways he can as often as he can that success will follow. There are sermons in the life of Gregory which are worthy of every physician's consideration—it is a typical culmination of successful, harmonious workings of the mind and body with character as the crowning glory of success. Dr. Gregory has been honored by the profession because he is one of its greatest men; he shows that as a man thinketh so he is; the thoughts of Gregory have been noble thoughts; his deeds noble deeds, and the well done thou good and faithful servant is the honored benediction upon his noble life. The Gregory banquet was an event in the medical history of St. Louis and the West. The *Globe-Democrat* in editorially commenting on this banquet, spoke of the influence of the medical profession in civilization, as follows:



"Doctors do not call themselves philanthropists, yet they practically accomplish more in that line than men of any other vocation. What a great, though quiet, force they have been in the building of the West! If the full story of their labors and sacrifices in Missouri could be told the record would touch every heart and impress every mind with its value and magnitude. Doctors are men of sentiment, wholesome and high-minded sentiment, suited to the needs and advancement of everyday life. They know few holidays, and often devote those they have to greeting a noble old teacher, as they did last night. They work in the shadows of human existence, but always toward the light. Americans could get along without politicians, being born that way, but the learning and goodness of the medical profession do not come by nature. It is taught by men like Dr. Gregory, and handed along unimpaired by his multitude of pupils."

About four hundred physicians were present on this occasion. They will all remember this event as one of pleasure and inspiration. The toasts given were full of the glories of such a life as that of Dr. Gregory; prophetic of success based on such lines as he has followed, and prophetic of the great triumphs of medicine and surgery.

The following is the program: Archbishop John J. Kain invoked a blessing on the feast and the occasion as the guests were seated. The

after-dinner speeches were as follows: "The State and the Medical Profession," Gov A. M. Dockery; "An Organized Profession," Dr. J. E. Tefft, Springfield, Mo.; "Greetings from Chicago," Dr. H. N. Moyer; "Evolution of Surgery," Dr. DeForest Willard, Philadelphia, Pa.; "American Surgery," Dr. Warren B. Outten, St. Louis; "The Medical Press," Dr. George H. Simmons, Chicago. Surgeon-General Walter Wyman, of Washington, D. C., was unable to be present, and his paper was read by Dr. Lutz. It was entitled "Our Teacher," and in it Dr. Wyman told of the first surgical operation he had ever witnessed, which was performed by Dr. Gregory. Chancellor W. S. Chaplin, of Washington University, spoke on "The Teacher in Medicine;" Dr. J. D. Griffith, of Kansas City, on "The Profession in Missouri;" Dr. N. B. Carson, of St. Louis, on the "St. Louis Medical Society;" Dr. W. G. Moore, of St. Louis, on "Ethical Ideals," and Dr. Gregory responded to the toast, "Our Guest." An album, containing the autograph signatures of all the guests was presented to Dr. Gregory by Dr. Charles H. Hughes.

Dr. Gregory's response to the toast, "Onr Guest," was a happy climax to the evening. When the venerable man rose in his place he was greeted by a demonstration such as it is few men's honor to receive even in the course of a long and useful life as his. Every one in the room rose to his feet, the applause was prolonged, and no doubt was left in the minds of any of the secure place "Our Guest" held. Dr Gregory began his response by saying that "All the world's a stage," and expressed his pleasure in standing before so many whose places in the drama of life were of the first importance. He referred to his work as a teacher for years past, and said that his efforts would have been of a different kind if he had not met everywhere that appreciation and sympathy which make labor sweet and life worth living. He said that in his attitude before his pupils he had found that both must learn if either is to learn—that the task of teaching brings out all that is profound in the study in hand, and that the instructor finds himself, side by side with his pupil, a learner. He spoke of the fact that too much was often expected from pupils; that the word student implied labor, and that labor ought to be entered into thoroughly by the instructor if the best results were to be obtained. In concluding, he spoke with great feeling of the pleasure he had found in the friendship of those about him, of the appreciation they had manifested by their words and gift. He said that all labor of a long life was doubly repaid in the consciousness of the friendships he had won and retained.

Among those present were Drs. Harold Moyer, George H. Simmons, G. Frank Lydston, A. E. Halstead, of Chicago; Drs. Willard and E. H. Gregory, Jr., of Philadelphia; Drs. Jackson, Fulton, Morrow, Hall and Griffith, of Kansas City, and the following: R. Gifford, Lawrence, Kas.; W. E. Wiatt, East St. Louis; L. J. Schifferstein. Effiingham, Ill.; W. S. Allen, Olean, Mo.; J. E. Teft, Springfield, Mo.; G. R. Highsmith, Carrollton, Mo; I. N. McNutt, Beverly, Mo.; R. M. Higgins, Webster, Mo.; H. T. Coleman, Pattonville, Mo.; W. A. Young, Springfield, Ill.; F. P. Norbury, Jacksonville, Ill.; W. H. Schultz, C. A. Beier, Ferguson, Mo.; D. M. Pearson, Louisiana, Mo.; Curtis Brown, Herron, Ill.; A Gifford,

Lawrence, Kas; J. A. Life, Carthage, Ind.; E. P. Raab, Belleville, Ind.; E. M. Irving, New Athens, Ill.; J. W. Smith, Richmond, Mo.; J. D. Brazeel, Wagoner, I. T.; J. M. Pfeffenberger, Alton, Ill.; J. P. Burke, California, Mo.; W. A. Hashell, Alton, Ill.; T. W. Zangers, Troy. Mo.; M.L. Norwood, Locksburg, Ark.; D. Nowlin, Montgomery, Mo.; George Nash, Marysville, Mo.; J. J. Newton, Little Rock, Ark.; W. R. McKenzie, Chester, Ill.; E. B. Montgomery, Quincy., Ill.; D. F. Manning, Marshall, Mo.; W. H. Benson, East St. Louis; F. Vinsonhaler, Little Rock; A. G. Dickinson, Paragould, Ark.; J. B. Runyon, Little Rock, Ark.; V. MacGammoa, Arkansas City, Ark.; W. B. Lawrence, Batesville, Ark; Dewell Gann, Benton, Ark.; Jacob Geiger and Chas. Wood Fassett, St. Joseph; W. O. Bannon, Mexico, Mo.; George H. Gilson, Raymond, Ill.; W. A. Tichenor, Chicago; H. C. Fairbrother, East St. Louis; C. F. Wilhelmj, H. J. De Haan.

Tri-State Medical Society.

The Chicago meeting of the Tri-State Medical Society (Iowa, Illinois and Missouri) in April, was of special value by reason of the discussion of many subjects now prominently before the profession, and in which much interest is being shown because of the possibilities for extension of the newer methods of therapy. This society, by reason of its heterogenous program, always furnishes some food for thought and enlightenment upon the newer methods of practice. It is this feature which proclaims its value as a society in spite of the multiplicity of medical organizations in the territory covered by it. The meeting was held at the Great Northern Hotel, where excellent facilities were offered for exhibition purposes and assembly hall. The Chicago profession was generous in its treatment of the society, both in point of attendance, giving of clinics, and last but not least, in the elegant banquet at the Great Northern on Thursday evening.

Dr. Jno. C. Murphy, of St. Louis, presided, and the program was under his direction, ably assisted by the efficient secretary, Dr. W. B. La Force, who has accomplished so much in maintaining a high standard in the papers presented before the society. The special feature of the meeting, which above all others attracted the attention of the members, was the excellent demonstration of Dr. Purdy, of Chicago, on X-Ray therapy in malignant tumors, viz., carcinoma, sarcoma, lupus, etc. This report heralds the development of this valuable agent in the field of therapeutics, and especially in the treatment of these malignant affections which have not yielded to the surgeon's knife or other methods of treatment. Dr. Purdy is to be congratulated on his excellent showing, and of the great interest he is taking in this promising field for original research.

Many other good and reliable papers were read at this meeting, all of which will appear in the columns of the Fortnightly, together with the discussions and other transactions. The society adopted a new constitution, making the organization now in perfect harmony with the American Medical Association.

The following officers were elected: Dr. Alexander Hugh Ferguson, of Chicago, President; Dr. F. B. Tiffany, Kansas City, First Vice-President; Dr. J. C. Sullivan, Cairo, Ill., Second Vice-President; Dr. W. B. LaForce, of Ottumwa, Ia., Secretary, and Dr. E. Lanphear, St. Louis, Treasurer.

The society will meet at Hannibal in 1903.

THE editorial rooms of the *Interstate Medical Journal* have been removed to the Linmar building, Washington and Vandeventer avenues.

THE "REORGANIZATION" meeting of the Medical Association of Missouri, at St. Joseph, May 20-22, promises to be one of the best gatherings of the year. A program of thirty papers has just been issued.

THE Meeting of the Illinois State Medical Society will be held at Quincy on May 20-22, and an elaborate program has been prepared. Reduced rates on all railroads.

SAMUEL H. WAINRIGHT, M. D., medical missionary at Kobe, Japan, has returned to the United States on a visit. Dr. Wainright is a brother of C. F. Wainright, of Kansas, City. He expects to remain in the United States for one year and take a much needed rest.

DR. GEO. F. HULBERT.—The death of Dr. Geo. F. Hulbert, which occurred on April 22d, came as a shock to all of his many friends, the majority of us had not yet missed him and were not aware of his sickness. Coming just at the time of his greatest ability and possibility, when the man had reached that period in life when he was midway between the days of preparation and the days of decline in activity, death seems to be never more unwelcome. The profession joins his family and friends in profound regret.

LADIES' HOME JOURNAL.—From its charming cover by Albert Herter to its last page the May issue of The Ladies' Home Journal excels in all ways. The most important new feature is the beginning of Ernest Thompson Seton's department for boys, which is written and illustrated by the famous naturalist-author-artist. Lindsay Denison, who knows President Roosevelt in a very personal way, writes of "The Outdoor President," and Helen Keller continues the marvelous story of her life. The fiction features are Miss Portor's "Those Days in Old Virginia," and the first part of a delightful story by Grace S. Richmond called "The Indifference of Juliet. "Neltje Blanchan tells "How the Birds Build Their Nests," and Will Bradley shows the boudoir of "The Bradley House." Mr. Bok's editorial is a fine bit of sarcasm aimed at the wise New Yorkers, and Mr. Mabie in his literary talk deals with the reading habit and several new books and writers of note. There is no end of good and helpful advice and interesting facts in the various departments, and the illustrations are conspicuously attractive.

The Reviewer's Table.

Books, Reprints, and Instruments for this department, should be sent to the Editors, St. Louis.

A Text-Book of Obstetrics. By Barton Cooke Hirst, M. D., Professor of Obstetrics in the Universivty of Pennsylvania. Third edition, thoroughly revised, with 704 illustrations, 36 of them in colors. Philadelphia: W. B. Saunders & Co., Publishers. (Cloth, $5.00 net; half morocco, $6.00 net.)

This work represents the very latest teaching in the practice of obstetrics by a man of extended experience and recognized authority. The practical side of the subject is especially emphasized, and to this end a large number of illustrations are introduced. Most of these are original, and are among the best on this subject. The arrangement of the subject matter, the index, as well as the illustrations are beyond criticism, and together make a good example of what the modern text-book should be. The reference given in the foot notes will be appreciated by more advanced students. Numerous changes have been made in the third edition. New matter has been inserted, especially in the chapters on Diagnosis of Pregnancy, the Pathology of Pregnancy, the Pathology of Labor, the Obstetrical Operations. Many new illustrations have been introduced, including three colored plates and to make room for these additions the less important parts of the text have been condensed wherever possible.

Progressive Medicine, Vol. IV., 1901. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo, handsomely bound in cloth, 400 pages, 13 illustrations. Philadelphia and New York: Lea Brothers & Co. (Per annum, in four cloth-bound volumes, $10.00.)

We have repeatedly called attention to this most progressive of the digests of the literature of medicine and surgery. It comes to us with the usual thoroughness, reliability and analytical consideration of the literature of the subjects found in this volume. Under Diseases of the Digestive Tract and Allied Organs Dr. Einhorn covers with great thoroughness the medical and surgical treatment of pathological conditions of the esophagus, stomach, liver, pancreas and peritoneum, and the ever-recurring topic of appendicitis. In Dr. Belfield's section on Genito-urinary Diseases the subject of general infection by the gonococcus is fully discussed, and tuberculosis of the genito-urinary tract receives the attention which its importance demands. Dr. Bloodgood's article opens with an especially full and important discussion of all the methods of producing anesthestia, both general and local the technique of lumbar puncture, its diagnostic and therapeutic importance and its use in spinal anesthetzaton. The various pathological condtions of the kidney are ably treated by Dr.

John Rose Bradford. Dr. Brubaker's section on Physiology presents the recent advances in the physiology of the glandular system with special reference to the therapeutic value of gland extracts in their therapeutical application. The section on Hygiene by Dr. Baker is notable because of the universal interest excited by the discussion aroused by Dr. Koch's statement that bovine tuberculosis is not dangerous to man, and the recent researches as regards the transmission of yellow fever. The Practical Therapeutic Referendum by Dr. E. Quin Thorton, although placed last in the book, possesses the greatest general interest and value to all practicing physicians. All the recent therapeutic methods and remedies are presented and their merits and demerits impartially discussed. It constitutes a therapeutic manual of the most advanced methods of treatment. In this brief synopsis of the contents only the most prominent features are touched upon. In each section every recent advance of value in relation to the diseases described is fully written of and from the most practical standpoint. The contributors are all authorities of the highest standing. The book is not a mere compilation of recent literature, but a series of critical reviews and original papers by masters of the subjects whereof they treat.

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Typhoid and Typhus Fevers. By Dr. H. Curschmann, of Leipzig. Edited, with additions, by William Osler, M. D., Professor of the Principles and Practice of Medicine, Johns Hopkins University. Handsome octavo of 646 pages, illustrated, including a number of valuable temperature charts and two full-page colored plates. Philadelphia and London: W. B. Saunders & Co., 1901. (Cloth, $5.00 net; Sheep or Half Morocco, $6.00 net.)

The classics in medicine today are few and far between, because of the multiplicity of books and the rapidity with which new editions are prepared and published. On this account it is a pleasure to occasionally meet with a studied volume, prepared with scholarly care and minutely considering the details of medical science. The German scholar to whom time is not a consideration nor the publishers, haste a distracting feature, is disposed to weigh well the material gathered for the purpose of making a book. In consequence we have such classics as Nothnagel's Practice, a work encyclopedic in its scope and exhaustive in the consideration of all information that pertains to disease. In the original German Nothnagel is the universal authority to which authors, teachers and practitioners turn for that supreme endorsement which is so essential in the establishment of facts in medicine. The teachings of clinical medicine, like the additions to law, believes in authority, not only for its aid in the promulgation of what is recognized as the essential essence of established knowledge, but to insure the genuineness of facts and to make possible the universal recognition of the great truths of scientific medicine. This volume is rich in its material, thorough in its analysis and exhaustive in its detail. Osler has Americanized this German classic and his scholarly terseness, keen clinical analytical perception is in evidence in the editing. Such literature as this

is to the scholar in medicine a well-spring of pleasure and profit. It is a pure classic. Every student of medicine will read it, study it, and refer to it, knowing it is the leading authority of today in clinical medicine. The American edition surpasses the German by reason of having the added value of the American editor's vast experience, with his careful notation of observations incorporated into the work. New material has been added to all of the chapters, especially on Bacteriology, which gives the very latest views on the subject of the distribution of the typhoid bacilli, etc. The chapter on Pathology is indeed a valuable one, for in it is found the original work of Mallory, of Thayer and of Keen (all Americans) who have in recent years added so much to our knowledge of typhoid fever. Diagnosis has been considered thoroughly and all of the recent work in laboratory methods is considered in its minute details. The chapters on Perforation and Peritonitis and Hepatic Complications give new interest to these important accidents and complications of the disease. Taken as a whole there is no work like in Nothnagel in the literature of today, and every practitioner owes it to himself and his patrons to be abreast of the latest literature on clinical medicine and purchase this grand, good work. Saunders has published it in excellent form, of good size, good type and made in the usual standard of this well-known publishing house.

An American Text-Book of Pathology. Edited by Ludvig Hektoen, M. D., Professor of Pathology, Rush Medical College, Chicago; and David Riesman, M.D., Professor of Clinical Medicine, Philadelphia Polyclinic. Handsome imperial octavo of 1245 pages, 443 illustrations, 66 of them in colors. Philadelphia and London: W. B. Saunders & Co., 1901. (Cloth, $7.50; Sheep or Half Morocco, $8.50 net.)

Pathology is the foundation of practical medicine, without a knowledge of the nature of disease and its varied phases there can be no real scientific reasoning upon which to base rational therapeutics. It is a wholesome sign of growing activity in internal medicine to notice the number of excellent works on pathology being issued by the medical publishers. It shows that the profession realize that to be successful in diagnosis and in therapeutics there must be the true knowledge of disease in all of its ramifications. The American text-book covers this subject in a concise, explicit and entertaining manner and leads all other text-books in the English language. Practitioners need its counsel and students its comprehensive features as a text-book, because it covers the essential principles and facts in General Pathology and Pathologic Anatomy, with especial emphasis on the relations of the latter to practical medicine. Each section is treated by a specialist who is thoroughly familiar with his particular subject, and can best frame the theories and conclusions in an authoritative form. The illustrations, which are nearly all original, and of which 66 are in colors, are unsurpassed in beauty by those in any similar work in the English language. In fact, the pictorial feature of the work forms a complete atlas of pathologic anatomy and histology.

Original Department.

PAPERS for the Original Department should be in hand one month in advance, and contributed to THE MEDICAL FORTNIGHTLY exclusively. A liberal number of extra copies will be furnished authors, and reprints may be obtained at reasonable rates, if request accompanies the manuscript. Engravings from photographs furnished free.

Contributions, and books for review, should be sent to the Editors, 312 Century Building, St. Louis.

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Facial Paralysis; Epilepsy with Pronounced Stigmata of Degeneracy; Partial Paralysis; Cerebral Paralysis with Marked Aphasia; Cerebral Syphilis.

By Daniel R. Brower, M. D., LL. D.,

CHICAGO,

Professor of Nervous and Mental Diseases, Rush Medical College, and Northwestern University, Woman's Medical School, Etc.

A Clinical Lecture delivered at Cook County Hospital.

STENOGRAPHICALLY REPORTED FOR THE MEDICAL FORTNIGHTLY.

FACIAL PARALYSIS.

GENTLEMEN:—These are two cases of facial paralysis, one of which you have seen before. The boy, also, gives a history of injury. He fell and a horse ran over him, after which he developed some fever. This was not a traumatism directly of the nervous system; but a traumatism will start going the plasmodia of malaria, or any other germ, and does it through the nervous system. Most of the infections require a condition of hypertrophy before symptoms will result. The patient must be below the standard of health before the microbes can develop their toxin and produce symptoms. This boy's accident set going the plasmodia which may have been in his blood, if it turns out to be a case of malaria as was supposed at the time. An accident will produce chills and fever by establishing a condition of hypertrophy, during which the plasmo-

dium, or any other of the numerous germs, will get into the body. He is before you because of his facial paralysis.

The occipito frontalis on the left side has perfect movement, but there is none on the right. The left eye can be completely closed, the right only partially. The paralysis came on about a year ago, and for some reason has not disappeared. He laughs on one side of his face, although he has some power of moving the muscles on the right side. He can whistle. This case shows not only the ordinary symptoms of a facial paralysis, but something more. There is a complete loss of hearing on the right side; the left ear is perfect. There is a paralysis of the seventh and eighth nerves. Whatever recovery has taken place is in the lower part of the facial nerve supply. I thought we had here a case of facial paralysis of meningeal origin. We find here in this case a paralysis of the portio-mollis and portio-dura. Let us test his taste-sense. The posterior part of the tongue has the taste-sense, but not the anterior part. The anterior part of the tongue gets its taste-sense from the chorda tympani nerve. Where this nerve gets its taste fibers from is a matter of dispute. Whether it is from the nerve of Wrisbar or from the trifacial, is questionable, but no matter where it comes from it is the chorda tympani which furnishes taste to the anterior two-thirds of the tongue. The glossopharyngeal furnishes taste fibers to the posterior, so that this nerve is not involved. Facial paralysis may be central, as in the young lady, or nuclear, involving the nuclei origin; it may be meningeal, which I at first believed this case to be, or it may be peripheral. This voice paralysis is from a lesion in the aqueduct of Fallopius. Upon closer examination today, I learned that this boy never could hear with his right ear, so that we cannot consider it as a lesion. Therefore, it is an ordinary case of peripheral paralysis.

The interesting feature of this second case is, that the young lady has no power of movement of the muscles around the corner of the mouth. She laughs altogether on one side of the face. The boy can work the corners of his mouth, but not so the girl.

As to treatment, these peripheral cases, if treated vigorously, will usually get well. This man has not improved, for some reason, probably on account of lack of proper treatment. The first thing I do is to get an artificial muscle. I have made it out of a piece of hard rubber something like my key or a fish-hook, and hook it into the corner of the mouth, fastening it around the ear with an elastic band. This hook should be worn several hours a day and will, to a considerable degree, check the wasting of the muscles. In addition these cases should have gentle facial massage, and a mild galvanic current, without interruption, should be passed through the branches of the nerves. After the inflammatory condition has subsided, exercise these muscles, first with the interrupted galvanic current, using the least current that will make contraction, and later on the faradic current.

The internal treatment should consist of the administration of the iodides and attention to the general health.

EPILEPSY WITH PRONOUNCED STIGMATA OF DEGENERACY.

I present this child in order to show you some of the stigmata of degeneracy. Some of you have seen this case before, and if any of those who have not seen these stigmata would like to go over the case, I shall be pleased to have them do so. There is one other mark in evidence, which I did not call your attention to before, and that is the want of proper inequality between the fingers. The three fingers of the right hand are almost of equal length.

The very noticeable stigmata in this case, which I have shown you, are the Darwinian tubercle in both ears, the general malformation of the ears and their lack of uniformity. Neither ear has a lobe. Compare the anti-helix of Mr. Schultz' ear with that of this child's ear, and note the difference; also notice the concha in the ear of the child, as it is quite as large as the one in Mr. Schultz' ear, although there is a great difference in the age of the two. The right ear is considerably higher than the left, and there is quite a difference in the general outline of the ears. One eye is also higher than the other. The upper jaw is malformed, the upper teeth working beyond those of the lower jaw. The teeth do not come in close approximation, and the alveolar processes are enormously hypertrophied. The palatine arch is very narrow and high. The septum is enormously developed.

This child is an epileptic. Shortly after its birth there was a convulsive seizure. Since about a year ago, following an accident, the convulsive seizures have become very frequent, and before the child leaves the room there may be a convulsive manifestation. It has had three today, and has anywhere from three to twelve in the course of twenty-four hours.

The child was brought to Professor Senn for treatment on the idea that the traumatism was the cause of the epilepsy, and that a surgical operation might possibly cure the child. Professor Senn kindly consented to have the child brought here for my observation. I emphasize the degeneration stigmata in this case for this reason. They show that there has been a profound disturbance of this child's nutrition. They show that this child's cerebral development is not on normal lines. The development of the body depends upon the brain. As you all know, every end organ of the body has either a direct or an indirect communication with the brain, and the brain determines, directly or indirectly, the condition of nutrition in every part of the body. In this case we find that development of the ears, eyes, head, hands and upper jaw has not been on normal lines, as all these important structures show malformation and this malformaiion starts in the brain. Epilepsy is a brain disease.

The advantage in being able to recognize these stigmata is that it enables you to make a more accurate prognosis, and you will find, when engaged in practice, that you will get vastly more credit from a prognosis than from treatment. Prognosis, the power to look into the future, is looked upon as a wonderful faculty and sign of ability, even by the most educated of the laity. These stigmata will enable you to make a better prognosis than you could possibly make without them.

In this case a most unfavorable prognosis must be made. It is possible that a craniectomy may diminish the frequency of the attacks, and make the care of the child less burdensome, but there is nothing, absolutely nothing, that can cure a brain as abnormal as this one must be in order to give rise to such pronounced stigmata of degeneracy. This child is also almost entirely deficient in thyroid gland. In these cases of deficient development some advantage is derived from the administration of thyroid gland. This child is undersized and it is possible that its developmental capacity might be increased by feeding it desiccated thyroid, about one grain a day to begin with, gradually increasing the dose as tolerance is established. It is utterly impossible, however, to cure its epileptic seizures.

PARTIAL PARALYSIS; CEREBRAL PARALYSIS WITH MARKED APHASIA.

We have here two cases of partial paralysis, one of which you have seen before. I will endeavor to demonstrate to you, by the reflexes and the electrical reaction, the difference between a cerebral and a peripheral palsy. This young woman shows a very interesting case of cerebral paralysis with a very marked aphasia. It is a case of motor aphasia. She recognizes her name when written, at a glance, but cannot repeat it, even if it is pronounced for her. She can by her sign language indicate that she recognizes what she sees and how it is to be used. This peculiar aphasia was demonstrated to you during her last visit to our clinic. It is more especially to show you the difference between the arms of these two patients that we brought her here today.

This second patient had an accident last May. She was thrown from her bicycle, struck on her elbow and the left shoulder was thrown out of joint. When she began to move her arm she found that it was paralyzed —a traumatic neuritis. The muscles are still sore to the touch. This first case has no muscular soreness. There is a tenderness over the nerve trunks in the second case, but not in the first. Note how very much exaggerated all of the reflexes are in the arm, no matter where you touch the muscular tissue you get an active response. The elbow reflex is not present, whereas in the first case it is very marked. There is, in the first case, very great exaggeration of the reflexes; in the second there is no reflex response whatever. The second case has some sensation. A few weeks ago there was complete anesthesia, which had been preceded, for a number of days, by most intense pain. The first case had had no pain in her arm, whereas the second had most intense pain for a few days, as mentioned. There is no impairment of sensation in the first case.

The most striking and characteristic points of differential diagnosis between peripheral paralysis and cerebral paralysis, are an exaggeration of the reflexes; the difference in the tenderness of the muscles; the difference of tenderness over the nerve trunk; the history of anesthesia following pain. All but the first of these points are indicative of a peripheral paralysis.

Another peculiarity in the first case is the contractures, and we can produce a wrist clonus, which cannot often be developed in these rigid contractures of the fingers. It is practically impossible to overcome them.

There is also some flexion at the wrist and a little rigidity at the elbow, which is sometimes not present in these cases.

Notice the difference in appearance of the integument in these two cases. The glossy appearance of the hand in the second case, and the normal appearance in the first case are very striking.

Let us see what the faradic current will do to the muscles of the arm of this first case. Notice the very prompt response. In the second case, a current which is very painful to her produces no motor response whatever. That is another difference. Now, let us see what the reaction to the interrupted galvanic current will be. It takes a current of about ten milliamperes to produce a reaction and, as the current in this battery is only two milliamperes, we get only a very weak response. In the second case there is no response whatever, but with a strong galvanic current we do get a response. When I tested her at the Woman's Medical College a few weeks ago, we got a good reaction with ten to twelve milliamperes. There is a diminished sensibility to the galvanic current, and complete loss of sensibility to the faradic current in this case.

Now as to the treatment. Shortly after the development of a neuritis, within the first week as the pain subsides, the paralyzed extremity should have gentle massage, the rubbing and friction movements, not the kneading or slapping movement. As the muscular pain disappears the massage can be given with more energy, and the treatment can be aided to great advantage by the use of the constant galvanic current of about five milliamperes. Pass the current over the back of the neck and over these affected nerve trunks. It will diminish the activity of the inflammation and assist in removing the exudates. The exudates in the nerves produce the paralysis. Place the positive electrode over the nerve and the negative electrode on the back of the neck. After the arm has gotten in the condition which this one has, and as soon as the pain disappears from the muscles, you may begin the exercise of these muscles by the interrupted faradic current, using a current of sufficiently high amperage to produce the desired muscular contraction. A current which produces no contraction is absolutely useless. There is occasionally an intolerance to any current, no matter how weak, and the galvanic current is then of no avail. Usually, however, there is a current which can be tolerated, and that must be used.

After the daily use of this current you will find that the arm will begin to respond to the faradic current; then you will substitute the galvanic for the faradic current.

The treatment must also embrace tonic measures, and if electricity fails to produce the expected results, we must resort to the hypodermic administration of strychnine.

CEREBRAL SYPHILIS.

This patient was admitted to the hospital in much the same state of mind as the previous patient. When the fever disappeared she could tell the attendants nothing whatever about herself, and they supposed it was principally because she could not understand the English language. She is partially deaf. She makes efforts to speak; her lips move, but no words

are spoken. She has a wild, staring expression, and does not fix her attention upon any object for any length of time. Her temperature is normal, or a little subnormal. It was ascertained that she was paralyzed first on the left side, and shortly after she was admitted she was found to be likewise paralyzed on the right side. It has been found necessary to restrain her. She tears her clothes. She makes no effort to squeeze my hand. She has some power, in that she grasps the bedclothing. She has to be fed; there is great difficulty in swallowing, and whether this comes from paralysis of the muscles of deglutition, or whether she is so defective in mind that she does not appreciate the necessity for it, I am not prepared to say. The interne has clearly demonstrated that the trouble is mental and not physical. She does not swallow simply because she has not the mental capacity to bring the muscles necessary into activity. He found the reflexes in the throat normal, consequently there must be a muscular power to swallow. She is a paralytic, having had first left, and then right, hemiplegia. There is a reasonable probability that there is a specific basis for the paralysis.

She is thirty-three years of age, and has marked arterial degeneration. The temporal arteries are tortuous and very hard. Such a degree of arterial degeneration in a person of thirty-three, without any renal disease, is, in ninety-nine cases of a hundred, syphilitic. It is an indication for the free use of anti-syphilitic remedies, and these she is receiving. You will notice the same arterial degeneration in the radial. She has enlargement of the post-cervical glands. These glands are very much indurated, hard, and feel like grains of shot under the finger. I have no doubt there is the same condition in other glands of the body. It is a case of organic brain disease. When admitted she was irrational, as was shown by the facial expression and the movements of the head. There is absence of the patellar-tendon reflexes on both sides. She has the condition that we call dementia, which is secondary to organic disease of the brain. The internes are treating the case on the ground that it is specific in origin; they are giving her full doses of iodide of potassium. This is a great remedy for cerebral syphilis. These patients should be given as much iodide of potassium as we can possibly induce them to take. The dose is only to be limited by the capacity of the patient to stand it. We are dealing with the brain; destructive processes are going on there, and unless we arrest them speedily, we will not be able to do so at all. If we find we cannot administer iodide of potassium enough, try the iodide of sodium, or the iodide of strontium. If we do not begin to see prompt relief give, with the iodides, mercury, and I am very much inclined to think that we will get better results in the treatment of cerebral syphilis if we give the mercury hypodermically. If injected into the subcutaneous tissue of the back, the pain is not great, and the mercury does not have to run the gauntlet of the liver. It acts more promptly than if we administer it by the skin. In addition, we can stimulate the alterative effects of these drugs and improve the condition of things generally by the use of electricity. Send through the brain four or five, or possibly six milliamperes of the galvanic current, placing a large electrode on the forehead, and one on the back of the neck. Continue this strength of current for ten or fifteen minutes.

These patients require a great deal of food. The attendants put articles of food into her mouth, she holds them for a time, and spits them out, having no mental capacity to swallow. She is now fed by the rectum. Of course, this is not a satisfactory way to feed these patients, because the rectum has no power of digestion. The food has to be predigested. The internes are using peptonized milk We cannot introduce much food at a time in this way, because it would irritate the rectum One of the internes tried to make the woman take food by the stomach once and he had so much difficulty on account of her resistance, that he has not repeated it since. Under the alterative influence of the iodides and other remedies she has taken, her mental condition will clear up sufficiently so that she can be induced to take food by the mouth. A good way to feed these patients is by the nose, taking a large, soft rubber catheter and introducing the food through a funnel attached to the end of the tube, but it requires two or three people to do this. It takes some one to hold the food, one to hold the arms of the patient, and a third to hold the head, and a physician to introduce the nose tube through which to feed the patient. Forcing the food either through the nose or by the mouth is disagreeable, but sometimes it is necessary. I hope, after awhile, the attendants will be able to induce this woman to swallow.

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For Pruritus Ani.—

Carbolic Acid	30 grn.
Calomel	1 dr.
Tar	1½ dr.
Menthol	20 grn.
Zinc Oxide	2 dr.
Simple Cerate	2 oz.

Wash the parts with hot water and spread the ointment on a cloth. Apply and fasten with a T-bandage.

The Itch.—Dr. C. E. Boynton (*Med. Summary*) reports the case of a young man who, having just recovered from an extensive scald of the arm, caught the itch. Colonies extended in all directions, and soon the young man suffered misery. About one application of the following ointment cured him, but he declared that he was nearly frozen by the menthol:

Menthol	gr. xl
Ichthyol	ʒiv
Calcium Sulphide	ʒi
Sulphur	ʒii
Wool-fat	
Olive Oil, sufficient of each to make	ʒiii

Apply as required.

A Note on the Application of Litholapaxy or Lithotrity to Stone in the Bladder in the Canine Species.

By Reginald Harrison, F. R. C. S.,

LONDON, ENGLAND,

Surgeon to St. Peter's Hospital.

IT HAS been said, perhaps, without sufficient consideration, that though man has profited much from observations made on the lower animals the converse in its relation to surgery is hardly balanced.

In this note I propose referring to a process of treatment which having been thoroughly tried and perfected in the first instance in the human species is now being extended to animals when placed under corresponding conditions of disease with equally satisfactory results. In the latter relationship I should state I occupied more the part of a privileged and interested spectator than that of a responsible operator. I refer to the treatment of vesical stone in the canine species by the most improved and modern methods of crushing, or lithotrity with evacuation of the fragments so triturated.

My attention was first called to this matter by my friend Mr. A. J. Sewill, M.R.C.V.S., a few years ago. Since then, and in some instances conjointly with Mr. Sewill considerable attention has been given by me to it. I have now before me a collection of stones illustrating calculous disorders in various positions taken from these subjects. These include two specimens of renal calculus *in situ* and others removed entire from the bladder by lithotomy. A letter from Mr. Sewill accompanying them says: "I am sending you a few specimens of calculi I have removed by suprapubic operation. The large one you will remember you removed one Sunday. I am not sending you any of the stones I have removed by crushing, as I don't suppose the pieces would interest you."

The animal referred to here upon which I performed the suprapubic operation unfortunately died of peritonitis. It was a bitch only fourteen pounds in weight. The stone weighed three ounces and two drachms, This operation was a difficult one and led me, conjointly with Mr. Sewill, to endeavor to substitute in these circumstances as in man a crushing for a cutting operation.

These crushing operations Mr. Sewill now informs me have been followed by a considerable success both immediately and remotely, as the canine species does not appear to be so liable to recurrence as is the case with adult males of the human kind.

In his work on the dog* in referring to the treatment of vesical stone only speaks of the removal of the latter either by some form of lithotomy, or in the bitch by dilatation of the urethra under cocaine or an anesthetic, and the withdrawal of the calculus by forceps if sufficiently small. In a further edition of this work the process known as litholapaxy or crushing

*Dogs and Their Management by the late Edward Mayhew, M.R.C.V.S., and A. J. Sewill, M.R.C.V.S., London, 1897.

stones and evacuating the fragments at the same time as applied to man with its small mortality and minimized suffering will for the future find a place in veterinary surgery.

I will describe a recent operation at which, as the French say, "I assisted at" with Mr. Sewill. The patient was a large and powerful collie bitch who had for some weeks been suffering from symptoms typical of stone in the bladder.

A sound was first passed into the bladder when a moderate sized stone was readily detected. As the animal was so tolerant and showed so slight evidence of distress other than that occasioned by the inconvenience of being held with the buttocks elevated by a single attendant who was well acquainted with her, Mr. Sewill at once passed a small ordinary smooth bladed lithotrite into the bladder. Being then asked to manipulate the instrument I readily seized the stone, and finding it was too large to withdraw it entire by the urethra I rapidly broke it up into minute fragments. When sufficiently triturated to pass through the eye of an evacuating catheter, the particles were withdrawn with an ordinary aspirator charged with water until the bladder was clear. Thus the stone was reduced and the fragments removed as in the human species with practically no bleeding no evidence of pain. The entire operation occupied seven minutes. We were quite prepared to give an anesthetic had there arisen sufficient indication for its use either locally or generally. Not even any kind of muzzle was required, and the patient walked away with the attendant from my house as if nothing unusual had happened. I saw her a few days afterwards with but slight signs of any irritability of the bladder remaining. The stone proved to be phosphatic and of about the size of an ordinary brown hazel nut.

The after-treatment consisted in washing out the bladder once a day with some boracic lotion until all traces of vesical irritability had ceased. In contrast with the bitch, the dog presents anatomical distinctions which renders the performance of crushing more difficult than in the former.

Mr. Sewill informs me the dog is less liable to suffer from any considerable stone formations in the bladder than the opposite sex. He accounts for this partly by observing that the stone whilst small often becomes impacted behind the penal bone of the male urinary apparatus. This occasions a retention which may be and is promptly remedied by what I would speak of from the surgeon's point of view as a perineal lithotomy. The whole subject is of so much interest that with Mr. Sewill's concurrence I have thus ventured to write of it briefly in the way it has been presented to my notice. From the examination of the two specimens of stone in the kidney to which I have also referred, I see no reason so far as the relations of the stone to the gland are concerned, why nephrolithotomy should not as in the human species be practised with success.

6 Lower Berkeley street, Portman Square, W.

Reports from Alaska show a prevalence of scurvy in many cities on account of the lack of fresh vegetables.

Intemperance and Life Insurance.

By C. F. Wahrer, M. D.,

FORT MADISON, IOWA.

Read at the Tri-State Medical Society, Chicago, Ill., April 3 and 4, 1902.

INSURANCE COMPANIES have by this time made careful estimates of the factors that enter into the product of life insurance. They have excluded all who are grossly intemperate and who have mortal chronic diseases, as tuberculosis, nephritis, diabetes, valvular heart diseases, and many other diseases that usually terminate fatally in comparatively short time; also they have, at least most of them, excluded unusually hazardous occupations, such as brakemen, divers, miners, aeronauts, and many others; also the extremes of age, not only infancy, but persons above sixty; also the vicious, the lewd, the debauched, and persons generally addicted to bad habits, that must sooner or later make their lives hazardous risks to carry.

Some companies recognizing that there is a large class, including the above mentioned risks, who would otherwise necessarily go without life insurance, have created a department of sub-standard risks whom they insure conditionally, for instance: If the assured dies within a given period on account of his extra-hazardous life, his premium will be greater during his life-time than that paid by the standard risk, and he also forfeits a given amount from the face of his policy.

Per contra: if the assured lives beyond the period stipulated, his risk is raised to a standard policy, with all the emoluments attached thereto. However, some companies, realizing the great hazard in insuring the vicious, the depraved, the drunken and the diseased, stipulate in their policies, that should the assured die on account of his faults, he must forfeit the benefits of his policy. Especially is this the case on account of intemperance in the use of intoxicants.

Whatever difference of opinion there may be between the temperance fanatic and the tippler, the W. C. T. U. and Lincoln, as regards General Grant's special brand of fighting whiskey, the army canteen, drinking toasts at the White House, the traditional centenarian whose chief diet is whiskey and tobacco, or the theory of alcohol as a food, I repeat, whatever opinions may exist on these and kindred topics, one thing is certain, the financiers all over the world who have their money invested in life insurance companies, all agree that drinkers belong in the class of hazardous risks, and their conclusions are right. Physicians, hygienists and physiologists are now a unit on the conclusion that even moderate drinking can be no benefit to anyone, that it may easily, without straining a point, lead to immoderate drinking, and that the latter, in the majority of cases, is injurious to health, not only jeopardizing the best interests of the habitue, but becoming a serious menace to him in case he should ever get sick. The outlook for a man who should fall ill with pneumonia, typhoid fever, dysentery, nephritis, heart diseases, diabetes and affections of the liver, is bad enough under the best of circumstances, but if the patient is an in-

temperate man, his hope for recovery is reduced very materially, and the fight for life is desperate, if not hopeless.

Every physician who has had much emergency hospital practice, or even private practice, among the intemperate, can give his assent to these statements.

We further know that men who follow hazardous occupations are frequently liable to injuries. In case the party injured is temperate, his chances for recovery from the injuries and the surgery incident thereto, are far in excess of the man who uses intoxicants.

Also, since inheritance plays such a great rôle in life insurance, and many a risk personally good, is rejected on account of bad ancestry, would it not be also well to consider, not only the physical features of such a risk who have drunken ancestors, but also the moral features of such a risk in all its bearings? Namely, intemperance is usually frequent among the vicious and those of low habits, who frequent all kinds of resorts, the dive, the brothel, the levee—all places of great risk to health and life. The children of heavy drinkers are personally poorer risks than those whose ancestors led temperate and pure lives. Not only do drinkers more easily acquire gonorrhea, syphilis, rheumatism and pneumonia, all of which destroy large numbers of lives, but the possibilities of curing such diseases among that class is relatively small as compared with their more temperate fellow-sufferers.

As an example I will mention two cases in my experience, both men about 30 years of age, who had been treated for syphilis, one two and one-half years, the other nearly four years, without signal benefit, because both were allowed to drink and smoke while under treatment. When they came under my care, these habits were strictly prohibited under fear of the penalty of death, and both made an uneventful recovery in less than a year from the time they first came to me. We might multiply instances to show the many correlative combinations in which intemperance is a factor as a great hazard in life insurance. Not only do the life companies recognize this, but the applicants themselves are aware of it, for whenever they are questioned as to their drink habits, they invariably, with few exceptions, minimize the gravity of their habit. We also find among this class the worst prevaricators, when they have once set out to get insurance.

Now, practically, we have two kinds of risks, the standard and the so-called sub-standard.

The first embraces all those who can pass a satisfactory examination and can get an unmodified policy at the usual rates; the second embraces all those who pass only a partially successful examination, and can obtain a policy with some modifications and inserted conditions. Of course in addition to these two classes, nearly all companies use discretion as to amount for which they would issue a policy, or the kind of a policy they will issue if the risk is not satisfactory in every way, and yet not sufficiently bad to be placed in the sub-standard class, or entirely rejected.

Now here I am coming to the nucleus of my contentions. I wish to make a plea for the establishment of another class of risk than the two al-

ready existing, and that for want of another or better name, I will call the super-standard class. This class shall possess all the good qualifications of the standard risk, namely, good family history, free from taint of disease, bad habits, longevity, personally good health, and in addition to all this they must be teetotalers.

There are a sufficiently large unmber of these who take life insurance to justify the creating of such a class of super-standard risks, to whom policies should be issued at reduced rates. This is no more than just to them, as they should not be compelled to pay for the shortcomings of that large majority, who aside from what good traits they possess from a life insurance standpoint, are most of them drinkers of intoxicants, who vary all the way from the worst inebriates up to the regular everyday tippler, and so-called thoroughbred sport.

This matter seems to me of sufficient importance to those interested in life insurance, both, as individuals who carry the policies, as well as the companies who insure them. I might fortify my contentions by compiling tables and furnishing data from most unquestioned sources to show the evils of intemperance, the danger to the lives of those who look too frequently upon the wine cup when it is crimson, the misery entailed to the indulger as well as those connected with him, the financial and moral wrecks resulting from such lives. But this is not necessary for the class I am addressing and the purposes of this paper All of you know from ripe experience that my assertions are true, not only from observation, but proven so scientifically, no matter what your own habits and practices are in the use of the flowing bowl.

Truly Cassio knew what he was talking about in his famous apostrophe to wine, even though I think he was a little tipsy when he said it: "Oh thou invisible spirit of wine, if thou hast no name to be known by, let us call thee—Devil."

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Nearly 3000 German doctors have signed a petition to the Reichstag asking that the burning of the bodies of persons who die of contagious diseases should be made obligatory.

Compulsory Vaccination.—A law which has become operative in France, requires that a child must be vaccinated during its first year, revaccinated at the age of 11, and again at 21.

The Human System can endure a heat of 212 degrees, the boiling point of water, because the skin is a bad conductor, and because the perspiration cools the body. Men have withstood without injury a heat of 300 degrees for several minutes.

Barbers, Osteopaths, and Opticians.—Bills now pending in the Iowa Legislature create three State boards to control and regulate barbering, osteopathy and optometry. The osteopathy bill provides that certificates may be issued to osteopaths as osteopaths and not as medical practitioners.

Monographs on Nervous Diseases

With Especial Reference to Hygiene, Nursing and Therapeutics.

Epilepsy.

By F. Savary Pearce, M. D.,

PHILADELPHIA,

Professor of Nervous and Mental Diseases in the Medico-Chirurgical College of Philadelphia; Neurologist to the Philadelphia Hospital.

EPILEPSY is a neuro-pyschosis in which a tendency to convulsive seizures is a permanent feature of the disorder. The disease is well known to be hereditary as to the degenerative tendency, and it will frequently be found that where epilepsy has not existed in the previous generation, there will at least be history of alcoholism or specific disease in the ancestry. The disease may occur at any period of life. In those more truly hereditary cases it begins quite early, before the tenth year; it can be pretty positively stated, the more advanced the age at the development of the disease in the so-called idiopathic case, the less likelihood of heredity being an etiological factor. Up to the degenerative period of life when inhibition is less stable, epilepsy may appear as real stigmata of degenerative tendency. Other causes of epilepsy are injury to the head such as fractures, concussion or compression of the brain, meningitis, brain tumor, gun-shot wounds. Cortical apoplexy or meningeal hemorrhage is not infrequently the fundamental cause of the epilepsy coming on, due to insuperable obstacles at birth; and in such cases, the epileptic disease is but a symptom of the cerebral palsy of childhood. This is well marked in the case of a boy under the writer's care who is spastic, has a dolicocephalic head, has had convulsions since babyhood, and has from three to ten attacks of grand mal daily. He frequently suffers from post-epileptic palsy.

Epilepsy is also divided into focal or Jacksonian, where the spasm is limited to the part or member of the body, or where the convulsive seizure begins in this way; and secondly, general epileptic convulsions. Other divisions are petit mal and grand mal. Where the disease is well established, there is a peculiar physiognomy, one of mental depression and instability of purpose; also acne on the face, as a rule, the result of prolonged use of bromides—the so-called epileptic facies.

The attack may be ushered in by peculiar subjective sensations called aurae, usually a feeling of depression as of a cloud coming over the patient, the vision becoming dull, and in a moment passing into the convulsion. The aura may also be a pain in the epigastric-gastric aura; or rarely it may be of parasthesia in an extremity; or less frequently, an hallucination of smell or taste or hearing or sight. I have known a case where the odor of violets preceded the attack; another in which the discharge of a gun was the hallucination; while irregular sotoma, or the seeing of some

body may be the visual disturbance preceding the seizure. Following this there may or may not be irregular automatic movements in different parts of the body, and the patient then becoming unconscious, and as a rule, falling; although the light case may, with or without this precedent phenomena, pass into unconsciousness accompanied by dilatation of pupils, and if at table, dropping the fork or some other object—the spell lasting but a few seconds when the patient may resume his usual condition. The attack may be succeeded by somnolence or a sound sleep. In case the attack is one of grand mal succeeding these premonitory signs already mentioned, or with the initial cry in most cases, the patient falls over unconscious and goes into a general convulsive seizure, consisting of clonic spasms accompanied by frothing at the mouth, conjugate deviation of the eyes up and out towards the side of greatest cortical irritation, blood may also be seen coming from the mouth due to biting the tongue in the attack. The convulsion finally ends by trunk rigidity of the muscular system, within a moment or so, the entire attack is completed; there being rather sudden restoration of consciouness and of power in the extremities, although the intellect remains especially dulled for some moments, and there may be transient aphasia. The patient here again is apt to go into somnolence which may last a half hour or so; in exceptional cases, post-epileptic paralysis may occur or automatic acts, the patient going about doing things without mental control or appreciation of. In which attack, a patient is apt to have vesical or rectal incontinence. Occasionally what is termed substitution phenomena may take the place of the attack, *per se*, the patient going through automatic acts instead of convulsion, or condition of double consciousness may exist in which the patient may wander off for some hours or days coming to himself in a remote plase. This is termed ambulatory epilepsy. Rarely too, some more marked psychosis may be the substitution, as a mania or delusional insanity with homicidal or suicidal tendencies. If the attacks follow one upon the other in rapid succession, we have what is termed status epilepticus; and in such condition, the patient may actually die of exhaustion. The patient complains of soreness and pain in the body after a seizure and the body may be bruised in various places from the movements or from the falling at the beginning of the attack. Convulsions occur more frequently in the early morning hours when the patient is asleep, this is probably due to the lowered physiological ebb of the nervous system at this hour. In chronic cases, this rule will not be maintained, the patient will have the attack at any day or hour of the night. If he has had it at night, frequently he is not aware of the pasisng of the attack, except for the soreness in the muscles.

Prognosis.—An axiom in prognosis of epilepsy is that the younger the case, the worse it is for help or cure; the older the person per contra, the greater hope for amelioration or recovery. Among the latter class, we have subdivisions where mental degeneration takes place rapidly, and secondly, those where the attacks do not seem to produce any great mental depreciation. Focal epilepsies are pretty positively due to some definite organic lesion, and in proportion as the surgical aspect of the present in-

superable objects for extirpation of their irritating pathologic state, will surgical aid fail. But where such lesion is operable, as for example, a localized cortical lesion or depressed fracture, operation at the earliest moment will be fraught with relief, or cure in 50 per cent of cases. In passing, it should be stated that extra-dural hemorrhage in the newly born, ought to be treated surgically, if sequent epilepsy from a secondary irritation is to be avoided in later life. Such surgical procedure has as yet never been done, but has been suggested by Drs. S. Weir Mitchell and W. W. Keen. As refinements of diagnosis become more and more accurate in the new-born, will the possibility of such help from the surgeon be determined.

Treatment.—The above indicated surgical treatment, we most earnestly commend in early cases of the disease where there is any evidence of dural hemorrhage, or other foreign body causing irritation of the cortex. A child with epilepsy should be subject to the most rigid scrutiny for evidences of reflex irritations. Gastro-intestinal disorders including those due to parasites, as the nematodes or tremodes, should be expurgated. The use of depresso-motors is indicated in epilepsy since there is excitation of the motor cortex, such symptomatic treatment is, of course, to be desired in itself and these drugs do much good in this disease. Ten to fifteen grains of the bromide of potash should be given three to four times a day according to the age of the patient and the physiological idiosyncrasy. In giving the bromides, they should be continued for a month or two; when even if the attacks are stayed, it is wise to withhold the drug for a week, then to continue with small doses gradually getting up to the maximum, as mentioned. The opium treatment of epilepsy, which consists in the gradual increase of the drug up to producing stupor in the patient, has been commended by Collins in this country and by others abroad. The liability to disturb the stomach of your patient, and to produce the morphia habit seem to me strong contraindications against the use of the drug; although I have seen a hypodermic injection of morphia sulphate given during an epileptic status, quiet the patient and prevent further seizures for the time being. The use of cannibis indica will be found of value in cases of petit mal. A fluid extract of the drug is particularly serviceable if made from fresh berries, the drug being pushed to the full physsiological limit. The berries of the horse nettle or solanum carolinense especially in the form of the fluid extract, I have found beneficial in a number of cases of idiopathic epilepsy where there is no hereditary taint. At present in a case under this form of treatment after all other methods have failed, a fluid extract of the berries pushed to a drachm four times a day, has prevented an attack for three months, whereas he had been having them previously on an average of every ninth day. Belladonna is occasionally a useful remedy, especially where the circulation seems to have failed very materially; this in conjunction with nitroglycerine given in continuous dosage, will sometimes act favorably in allaying spells. The use of digitalis in combination with the bromides, has controlled attacks in many cases with feeble heart circulation, where the bromides alone had failed. The reason of this lies perhaps in the better circulation produced

in the brain, thereby conveying the bromides for better local action upon the cerebrum as well as in the more active circulation's carrying off waste products. In all cases of epilepsies, the gastro-intestinal tract should be particularly guarded. If indican be found in excess in the urine, especially is it important to use intestinal antisepsies, such as salol, grains two to four in twenty-four hours; also high flushings of the colon with lime water solution—an ounce to a quart of tepid water. If there be gastric dilatation, lavage of the stomach will frequently, by preventing absorption of undigested food products into the blood, produce happy results. Special care should be given to massage and hygienic condition of the skin, salt bathing is particularly desirable to stimulate cutaneous circulation, and to full extent, relieve any congestion of the meninges. Disturbed metabolism, specially the uric acid diathesis, calls for careful attention; and in the latter class of cases, the use of alkaline waters is to be commended.

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Uric Acid Estimation.—Cook has devised a new method for the quantitative estimation of uric acid. Ten cc. of urine are placed in a graduated tube, and from 0.5 to 1 gm. of sodium carbonate, and from 1 to 2 cc. of ammonium hydrate are added. The precipitated earthy phosphates are removed by centrifugation and the clear urine is poured into another tube. With this are mixed 2 cc. of ammonium hydrate and 2 cc. of a 5 per cent solution of silver nitrate to which ammonium has been added, and the precipitated silver urate is separated by centrifugation. Ammonium hydrate is again added and the solution is centrifugated until the minimum reading is obtained. One cc. of precipitate represents 0.001176 gm. uric acid in 10 cc. urine and the percentage is obtained by multiplying the total amount by 10.—*Meyer Bros. Druggist.*

Hematuria for Movable Kidney. In the case reported by Cabot (Boston Med. and Surg. Jour.) there was a hematuria with symptoms which seemed to indicate that it was due to dragging on a movable kidney; it was apparently mitigated by a change of position, which relieved the dragging. The patient was finally cured by operation. He studied the literature to find similar cases and finds but one which corresponds exactly in its description. It is plain, he says, that a kidney with short vessels will be quick to feel the effect of a downward pull. With a kidney lying unusually high, it is conceivable that this pull might produce considerable obstruction to the circulation before the organ came down low enough to be regarded as a movable kidney. Cases of hematuria are occasionally reported in which no cause can be discovered, and in which cutting down upon the kidney and splitting the capsule effects a cure. He asks if some of these may not be instances of congestion from the unrecognized downward drag, which has been corrected by the adhesions following the incision into the kidney.—*J. A. M. A.*

Fortnightly's Post-Graduate Course

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DISEASES OF THE LUNGS AND PLEURA.*

A Series of Papers written expressly for this magazine, by

BY ALBERT ABRAMS, A. M., M. D. (Heidelberg),

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Consulting Physician for Diseases of the Chest, Mt. Zion Hospital and the French Hospital

[CONTINUED FROM PAGE 275.]

BRONCHIAL STENOSIS.

Etiology.—Narrowing of the main bronchus, or one of the large tubes may be combined with a narrowing of the trachea (*tracheo-bronchostenosis*). A struma, especially a substernal one, is one of the most frequent causes of tracheostenosis. Tumors of the esophagus may also narrow the trachea. Among other causes of bronchial stenosis may be mentioned: aortic aneurisms, mediastinal and pulmonary growths, enlarged bronchial glands, pericardial exudates, dilatation of the left auricle of the heart, which is especially liable to compress the left bronchus, foreign bodies in the bronchus, vertebral caries, etc.

Diagnosis.—In all cases of tracheal and bronchial stenosis, respiration becomes necessarily impaired, and this is more pronounced the more rapid the development of the stenosis. While it is not difficult to recognize the symptoms of stenosis, the recognition of the site of the narrowing is of the greatest importance. In stenosis of the main bronchus, there is diminished expansion of the affected side with enfeebled breath sounds. Percussion may be unaltered, and it is this unaltered percussion sound coupled with enfeebled respiratory sounds even to their disappearance, which makes the diagnosis of bronchial obstruction so characteristic. On respiration at the site of the constriction, and even at some distance therefrom, stridulous breathing is heard. This is made up of high pitched, crowing or barking sounds, the so-called stenosis murmurs. The respiratory type (*inspiratory dyspnea*) is characteristic; it is manifested by retarded and apparently prolonged inspiration associated with retraction of the intercostal spaces and supraclavicular region of the affected side and the epigastrium. After having demonstrated that bronchostenosis exists and the site of the obstruction located, our next endeavor is to elicit the nature of the obstruction. If the stenosis be of syphilitic origin, antisyphilitic treatment must be tried. Such treatment does not mean small

* The first paper of this series, on "Cough," appeared in our issue of August 25th, 1900, and the following have appeared in their order: "Pulmonary Atelectasis," "Relation of Respiratory Diseases to the Circulatory Apparatus and the Nervous System," "X-Ray Examination in Diseases of the Chest," "General Therapeutics of Pulmonary Diseases."

internal doses of mercury and iodide of potash. Stenosis is urgent and demands vigorous mercurial treatment by inunctions, subcutaneous, or even intra-venous injections of mercury. In desperate cases, the subarachnoid route may be thought available. The thyroid gland must be carefully examined to exclude it as a factor in the stenosis. Enlarged cervical glands may suggest enlarged bronchial glands, syphilis, or even a mediastinal or lung neoplasm. Absess due to caries of the spine, and aneurism must be considered.

Differential Diagnosis.—Laryngeal stenosis is characterized by the following: decided respiratory excursions of the larynx. The murmurs of stenosis are loudest over the larynx. The voice is altered. The laryngoscope reveals the nature of the trouble. The patient sits up with the head thrown backward. The breath sounds though feeble will be heard equally loud on both sides of the chest.

Tracheal stenosis shows the same auscultatory phenomena as the former affection. The patient sits with the head held forwards with the face looking downwards. A mewing inspiratory murmur is heard especially if bodily exertion is made by the patient. The larynx does not move downward in inspiration, nor upward in expiration. The voice may be weak, but never altered to the extent, as in the former affection. The laryngoscopic examination is usually negative.

Treatment.—Etiologic treatment concerns itself with the condition provoking the stenosis, and when this is impossible, the treatment is purely palliative. Tracheotomy may be required if it can be done below the seat of the obstruction.

FOREIGN BODIES.

The usual site for a foreign body to lodge is in one of the bronchi, especially the right bronchus. It is not usual for a foreign body after having passed the larynx to become lodged at any point above the bifurcation. It is strange how in some instances foreign bodies may be tolerated without any marked symptoms, whereas in other instances the signs are often alarming.

Diagnosis.—Dyspnea may be present and its severity depends on the degree of obstruction. Violent paroxysms of coughing are common. If the foreign body is lodged in the rima glottidis, death may be immediate, unless the same is removed at once. Small bodies may be fixed in remote corners of the larynx, and occasion no immediate inconvenience beyond cough and some discomfort. Not unfrequently a foreign body in the larynx may cause violent glottis spasm, or many days after its reception inflammation and swelling of the laryngeal tissues takes place, causing violent dyspnea. The laryngoscope is indispensable in diagnosis. If the body becomes lodged in the trachea, dyspnea is necessarily more pronounced than if the body becomes fixed in one bronchus. The physical symptoms of occlusion of a bronchus by a foreign body are identical with those in bronchial stenosis beyond the fact that the foreign body is inclined to shift its position frequently passing even from one bronchus to

another. The laryngoscope is of value in diagnosis in two directions: first, in excluding the larynx as the site, and secondly, in determining its position, at any rate as fair as the division of the bronchi.

Morbid Anatomy.—Small objects may remain for years encapsulated with mucus. A small body may later on cause more inconvenience to the patient, owing to its taking up moisture and swelling, or by forming the nucleus of a concretion. The lesions are determined in a measure by the nature of the foreign body; if sharp, it may perforate the lung and travel some distance until eventually it may make its way through the skin. If the body be smooth, bronchial dilatation with lung consolidation may supervene. Abscesses, pneumonia and other lung complications may ensue.

Treatment.—The Roentgen rays are indispensable in locating the site of a foreign body if the latter is impervious to the rays. The location of the body may further be determined by the laryngoscope. The primary endeavor is to extract the body if possible, by a pair of long tracheal forceps, and this failing, tracheotomy should be performed and an effort made to extract the body with a pair of suitable forceps, probangs, coin-catchers or bent silver wire. When these means fail, more radical surgical measures must be adopted.

SPASMODIC BRONCHOSTENOSIS.

To my knowledge, this affection has heretofore enjoyed no specific place in our medical nomenclature. The affection in question must be dissociated from bronchostenosis as ordinarily interpreted, insomuch as the latter is, relatively speaking a permanent, whereas the former is a transitory, condition. Spasmodic bronchostenosis is, practically, nought else but asthma without paroxysms. Before describing the symptomatology of spasmodic bronchostenosis, I wish to refer succinctly to the bronchial musculature. The entire bronchial tree is provided with smooth muscular fibers which contract by irritation of the pneumogastric nerves and their branches. If in a dog a section is made of one vagus, relaxation of the bronchus on that side ensues. According to the conception of Biermer, the bronchial tubes are the antagonists of the inspiratory muscles in the same sense as the muscular coat of the arteries is antagonistic to the heart. The bronchial muscles, in other words, represent the so-called "lung tone," offering resistance to the volume of inspired air, and act, at the same time, in conjunction with the elasticity of the lung in promoting the act of expiration. Biermer contends that the bronchial musculature facilitates expectoration after a manner similar to other canals, like the ureter, esophagus, intestine, etc., which are supplied with a muscular coat lined by mucosa. Whatever theory may be espoused in the pathogenesis of asthma, all clinicians agree that the spasm element plays an important role. I have already referred* to the production of typic asthmatic seizures in individuals subject to asthma, after impaction of cotton in one or both nasal cavities. If the nasal mucosa were previously cocainized, no paroxysms could be induced. This simple experiment shows that in susceptible per-

* Heretofore Undescribed Neurosis of the Lungs, New York Medical Journal, June 13, 1896.

sons bronchial spasm may be vagi through the terminal fibers of the trigeminus. In the same contribution, I assumed the existence of two distinct functions of the vagus nerve, or, at any rate, the presence of nerve fibers with a dual function; nerve fibers which could dilate the longitudinally disposed muscular fibers of the bronchial tree (bronchodilator nerves), and nerve fibers which could contract the circularly disposed muscular fibers (bronchoconstrictor nerves). In the action of these two sets of nerve fibers, I saw an analogy in the vasoconstrictor and vasodilator nerves of the vasomotor system.

Etiology.—As in true nervous asthma, a nervous element is the most prominent feature of bronchial spasm other changes being either absent or secondary. More often, the bronchial spasm may occur coincidently with an attack of bronchitis, and this is the more frequent form of the affection.

Symptomatology.—In bronchospasm, associated with bronchitis, we have all the symptoms of the latter affection plus a spasmodic cough, which is exceedingly distressing to the patient and usually resists the conventional expectorants. If the spasmodic element predominates in bronchitis, the sputa are scant and viscid. The spasmodic cough, the concomitant of spasmodic bronchostenosis may persist for an indefinite period after resolution of the bronchial catarrh. If we auscultate the chest of a patient with bronchitis in whom is associaed bronchial spasm, we hear in addition to the usual rales of bronchits, dry, squeakiing, and groaning sounds which, unlike those in bronchitis, are chiefly expiratory with prolonged and accentuated expiration. In differentiating the rales of bronchial spasm from those of bronchitis, I have recourse to the inhalation of a few drops of nitrite of amyl, a manoeuver which I have described elsewhere.† Such inhalation carried to its physiologic effect will temporarily dispel rales due to bronchial spasm, while on the rales of bronchitis no effect is produced. In spasmodic bronchostenosis independent of bronchitis, the ordinary physical methods of examination are, as a rule, negative, and the diagnosis may be verified only by treatment, for which affection iodide of potassium is virtually a specific. Occasionally, one hears after repeated auscultation, when the patient is instructed to practise forced expiration, wheezing sounds which are more manifest over the large than the small bronchi. An invariable subjective symptom is a persistent spasmodic cough which is resistant to ordinary medication. Associated with the cough at times is slight dyspnea with a feeling of constriction about the chest, which is invariably aggravated at night. If asthmatic paroxysms should ensue from the bronchialspasm, they are always ill-defined and of short duration. Expectoration is slight or absent, and free expectoration always signalizes a suspension of the bronchial spasm. Like the cough of nervous asthma, the cough in bronchial spasm may be relieved by the most varied conditions, among which the influence of climate is paramount. In a cold and damp atmosphere, bronchial spasm is especially common. A transfer to dry climates and high altitudes, or even

† Drugs in Diagnosis, Am. Med. and Surg. Bulletin, October 10, 1898.

any change of locality, may cause an almost miraculous disappearance of the cough, even after medication has been most persistent and has failed. Errors in diet also constitute a common factor in bronchial spasm, and I have frequently noted its disappearance after correction of a gastric affection. I believe that many of the "stomach coughs," so-called, are due to bronchial spasm.

Treatment.—Many cases designated as bronchitis are merely cases of bronchial spasm, for which there is only one remedy, and that is climatic change. As in asthma, every individual with spasmodic bronchostenosis is a law to himself, as regards climate. I wish particularly to emphasize the value of the iodide of potassium in bronchial spasm.

In my experience it is a specific, but it must be given with circumspection in this as well as in other diseases in which its action is extolled. A medium daily dose is about 30 grains, alhough a daily dose of 60 grains is not excessive, when no idiosyncrasy is displayed toward the drug. We must guard against iodism, especially iodism of the mucous membrane, which manifests itself as edema and acute inflammation.

The following formula is of value in certain cases of spasmodic bronchostenosis:

℞ Iodide of potassium..... 5 drachms
Tincture of lobelia..... 10 drachms
Spirits of glonoin (1 per cent.)..... 16 minims
Elixir bromide of potassium.....to 4 ounces

Mix. A teasponful three times a day after meals.
This dose may be gradually increased if necessary.

DISEASES OF THE BRONCHIAL GLANDS.

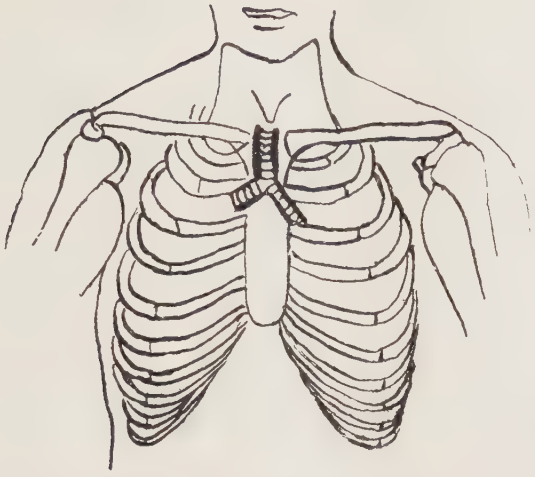
The small glands which follow the bronchi into the lungs, lying in the interlobular connective tissue, and which receive the perivascular, subpleural and peribronchial lymphatics are of little clinical importance. We are here dealing with the lower tracheal and bronchial glands, about thirteen in number, the largest of which lie below the bifurcation of the trachea.

Etiology and Morbid Anatomy.—The bronchial glands frequently enlarge in children as a result of the various catarrhal and inflammatory affections of the respiratory tract, but it is only rarely that the glands attain a sufficient size to be of clinical interest. The affections in children as well as adults, which lead to enormous swelling of the bronchial glands are: tuberculosis, malignant disease of the mediastinum and lungs, syphilis and lymphadenoma. In children, the lymph glands and bones are especially predisposed toward tubercular disease, whereas in adults, the glands are secondarily involved, as a rule, although, primary tuberculosis strictly confined to these glands is by no means an uncommon occurrence. It may also be emphasized that tuberculosis of the bronchial glands may be the means of infecting the entire organism. The affection is usually a chronic one, and may be latent. The tuberculous glands may soften and perforate contiguous structures. Perforation into the trachea may cause

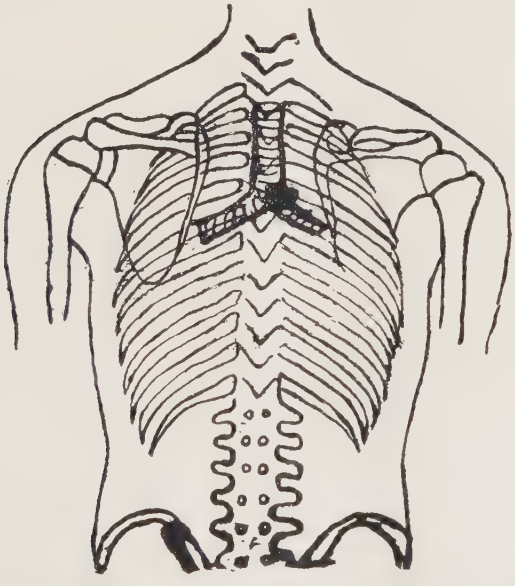
suffocation, or the glandular contents may be expectorated; if perforation involves a blood vessel, hemorrhage follows; into a vein, general tuberculosis; perforation into the bronchi may develop tuberculous bronchitis.

Diagnosis.—The symptoms of bronchial gland enlargement may be determined by direct physical, pressure and perforation signs. The direct physical signs are dulness over the manubrium sterni and in the intercapular region. In children all signs of dulness over the sternum must be regarded as suspicious of enlargement of the bronchial glands. If both bronchi are compressed by the enlarged glands, the breath sounds over the lungs are weakened; if, however, only one bronchus is compressed, the breath sounds over the affected lung are weak and accentuated over the healthy lung, owing to the vicarious breathing which ensues in the latter. Exaggerated, or even bronchial breathing may be heard owing to catarrhal and pneumonic complications. The heart may be displaced by the enlarged glands. The pressure signs may, or may not be present without the foregoing physical symptoms. As a rule, pressure signs are more frequent , insomuch as the situation of the involved glands eludes physical examination. Among pressure signs are the following: swelling of the cervical veins, edema and cyanosis of the face or arms from compression of the superior vena cava, subclavian or innominate veins; tracheo-bronchostenosis from pressure on the air passages; dysphagia, from pressure on the esophagus; pressure on the nerves, leads to laryngeal paralyses, spasmodic coughing, etc. Smith and Hare direct attention to the following sign which they believe to be due to pressure of the glands upon the venous trunks; when the patient throws the head well back, and the stethoscope is placed below the supra-sternal notch, a "purring" sound is heard during respiration. The size of the infra-tracheal and bronchial glands may be recognized by percussion of the vertebrae. The fifth dorsal spine is normally dull, the dulness extending for a short distance on either side of the vertebral column, but more to the right than the left. The shape and size of this square patch of dulness if much modified, may indicate enlargement of the glands in question. The accompanying illustrations show the situation of the trachea and bronchi in front and behind. In the latter figure the normal area of dulness is a reproduction from a lady, age 19.

Perforation signs may develop a broncho-pneumonia, lung tuberculosis, gangrene, hemorrhage, etc. The general symptoms of tuberculosis of the bronchial glands may present the picture of phthisis. More often, however, there is a previous history of measles, pertussis, catarrhal pneumonia, or enlarged glands of the neck, which is followed by a paroxysmal, intractable cough which seems to indicate a laryngeal origin. Expectoration may be slight or absent. In all cases, there seems to be a disproportion between the violent paroxysms of coughing and the slight lung changes as determined by physical exploration. This fact coupled with signs of the so-called scrofulous diathesis (anemia, swollen lymph glands, predisposition to catarrhal lung affections) and a previous history of measles, pertussis, etc., ought always to awaken the suspicion of swollen bronchial glands. In some cases, the latter may be recognized on the



Situation of the trachea and primary bronchi over which bronchial breathing is heard in health The largest bronchial glands lie just below the tracheal bifurcation.



Situation of the trachea and primary bronchi. The darkened area represents the size of the normal dulness caused by the bronchial glands in a girl of 19 years. The area of dulness lies wholly to the right of the vertebral line and measures 1.7 cm. in the vertical and 1.9 cm. in the transverse diameter.

fluorescent screen. If tubercle bacilli are found in the sputa, they may originate from the tuberculous glands alone which have perforated the bronchial tube.

Differential Diagnosis.—As a rule, swollen bronchial glands in children is caused by tuberculosis, less often by hereditary syphilis. Other affections causing such enlargement must not be forgotten, viz., pseudo-leukemia, actinomycosis and malignant disease. In pseudo-leukemia, the glands do not soften.

Treatment.—In tuberculosis, the question of nutrition is of primary importance coupled with fresh air and sunshine. Residence at the sea-side seems to exert a beneficial influence in all cases of lymph tuberculosis in children. Cod-liver-oil is also lauded, but there is no reason to believe that any remedy is possessed of specific influence, unless it be designed to promote general nutrition. Antisyphilitic treatment, notably the use of the iodides is to be encouraged in suspected syphilis. Syrup of the iodide of iron in continuous and increasing doses has been employed.

BRONCHIAL CALCULI.

Etiology.—Bronchioliths arise from calcification of dead organic masses which may consist of mucus, pus, blood, etc. The nucleus may be a foreign body or necrosed tissue. Chemically, bronchioliths are composed chiefly of the carbonate or phosphate of lime. Petrifaction occurs in concentric layers around the nucleus. Usually only one stone is present, but as many as 100 or more have been expectorated in cases showing diffused calcification of the bronchial walls.

Diagnosis.—The diagnosis is only then possible in the majority of cases when calculi are demonstrated in the sputa. The symptomatic complex is made up of irritation symptoms, notably, persistent paroxysmal coughing, sternal pain, hemorrhage from mechanic action and symptoms of bronchial stenosis when the calculus occludes the bronchial tubes. Notwithstanding the persistent cough the expectoration is scanty unless dependent on the fundamental affection, like bronchiectasis. The complications are those common to all foreign bodies in the air passages, viz., putrid bronchitis, gangrene, empyema, etc.

Differential Diagnosis.—Pneumoliths or lung stones originate, as a rule, from tuberculous caseous patches in the lung tissue or in lung cavities, and are, therefore, usually irregular in form. They may contain tubercle bacilli and invariably show the presence of elastic fibres after solution in hydrochloric acid. The fibres often show an alveolar arrangement. Pneumoliths may also contain lung pigment, which fact gives pos itive evidence of their origin. Bronchioliths may rarely contain elastic fibres. Pneumoliths being invariably surrounded by a connective tissue capsule can only be expectorated when a new process of destruction occurs in the lungs, therefore their expectoration is usually followed by an accentuation of the existing disease. The expectoration of bronchioliths on the contrary, is followed by rapid signs of healing.

(TO BE CONTINUED.)

MEDICAL MEMORANDA.

The Hypnotic Action of Apomorphin in Alcoholism (Coleman and Polk, Amer. Med., March 8, 1902).—The most important conclusions in this paper are the following: 1. To obtain a hypnotic action with apomorphin it must be given hypodermically. 2. The dose cannot be fixed. It is best to give at most 1-30 of a grain and repeat in a short time. If vomiting occurs it should not be repeated for several hours. If the patient is weak it should not be repeated. 3. The best results are obtained when the apomorphin is followed in two or three hours by some recognized hypnotic. 4. It is of use as a hypnotic in "ordinary drunks," and in cases verging on delirium tremens, but in some of these has no effect. In delirium tremens it is without beneficial effect, and may even be dangerous on account of its depressing action.

The Value of Urea Estimation.—Behrend (Amer. Med., March 15, 1902) says that the amount of nitrogen excreted in urea varies so greatly with the amount of proteid ingested, the amount of muscular work done, etc., that deduction from the per cent of urea in the urine are of little value in estimating nitrogenous metabolism. His method is the following: Excretory nitrogen is derived either from the food or from the tissues of the body. By a rigid diet and keeping the patient at rest the body is kept in a state of nitrogen equilibrium. The nitrogen in the food may be estimated and equals the nitrogen in the urine plus that in the feces. Two deviations are possible, either that excreted may be in excess of or less than that ingested. If in excess it must be from the tissues, as that ingested is kept constant; if less it has either gone to build up proteid tissues, or is retained, as excretory products. Practically we may proceed as follows: The patient is put on a diet consisting of 1½ liters of milk, 6 eggs, 250 grams bread, 45 grams butter, and kept at rest. The nitrogen in this amounts to about 13 grams. After three or four days the urine is collected, and daily amount of urea estimated. The urea represents about 80 per cent of the total nitrogen excreted. Since the molecular weight of urea is about 60, the amount present in each molecule is 46⅔ per cent; the total amount of nitrogen in the urine can readily be calculated by this formula:

$$\frac{\text{amount of urea x } 46\frac{2}{3}}{.80}$$

or more simply the amount of urea multiplied by seven-twelfths. If then the amount is found to be much greater or less than 13 grams the amount ingested, the inference is that the nitrogenous metabolic process is abnormal.

The Unrecognized Chancre.—In the International Medical Magazine for October William S. Gottheil calls attention to the frequent insignificance and fugacity of the syphilitic initial lesion, which leads to its non-recognition in quite a large proportion of cases. Ignorance of its occurrence, and not voluntary falsification, is the cause of the frequent absence of a syphilitic history in undoubted specific cases. The author

calls attention to the following points of diagnosis: 1. The presence of a tumor as the original lesion. In its essence, and invariably at the beginning, the chancre is a small, round cell accumulation in the skin or subcutaneous tissue. Ulceration may occur, and usually does, or even phagadaenism; but these are accidental, and epiphenoma, and almost invariably the specific induration is appreciable at the base of the lesion. 2. The tumor is indolent, painful, and recalcitrant to treatment. 3. A peculiar and characteristic "stony" induration of the nearest lymphatic glands accompanies it, different from the general adenopathy that occurs later as a consequence of the systemic infection. Other lesions, as gummata, do not show it. 4. Chancre runs its full course in a few weeks, whilst tuberculosis takes months, and carcinoma even years, for its development. 5. The well known signs of general luetic infection, osteocopic pain, cephalalgia, synovitis, general lymphadenitis, exanthem, etc., must be carefully and persistently searched for in every suspicious case. They may be so slight as to entirely escape careless examination.

Epilepsy.—The following interesting case is reported by Dr. Francis W. Campbell, in the *Canada Medical Record*. A. C. was married in 1861, at the age of 22 years. So far as I can ascertain, previous to marriage, she never had an attack of grand mal. She, undoubtedly, had many attacks of petit mal, occurring, so to speak, in clusters. They would be absent for months, and then recur, many occurring in a day, and then disappear again. Her husband did not know this at the time of his marriage, nor for some time after. It was not till the spring of 1862 that she became pregnant, and in August, when quickening occurred, she was one night seized with a severe convulsion. I saw her immediately, and recognized at once its character, that of a severe epileptic fit. It was at this time I discovered the patient's history, as I have briefly stated it. I also learned that she had been wet nursed by one who had had, at long intervals epileptic attacks, and whose son had developed the disease. From this onward she had occasional attacks, but went to her full period, and was delivered of a healthy child. She also made a good convalescence, and her baby was nursed by a healthy wet nurse. The treatment adopted was 15 grains of bromide of potash three times a day, with a half drachm at bed-time. It is needless to give minutely the history of this case, extending over so many years. Briefly, however, it is as follows: She subsequently bore three children at full term, all of whom are alive and in good health. She was also delivered of three children, about the seventh month, all of whom died within a few days of birth. During the interval between the first attack and the year 1875, a period of some thirteen years, she had severe attacks, generally about the menstrual period, and they invariably occurred at night. An attack during the day only took place two or three times during that period. This fact enabled her to move about freely, going to church, social gatherings, etc., and did not necessitate a companion being with her. The night attacks varied in severity, but, generally, were very severe, indicated constantly by minute extravasations after a fit, over the face, down the side of the neck and encroaching on to the upper part of the chest. On one occasion, during the fit,

she got the heel of the left foot over the nail of the right big toe, and forced it so loose, that it was the following day removed by Dr. Roddick. She visited Scotland several times and consulted eminent men, who made no change in treatment, beyond increasing the dose to 20 grains three time a day, and 40 grains at bed-time. Special attention was directed to be given the bowels, so as to have one good motion daily. She, up to this time, had taken the bromide very regularly, but her intellect and spirits continued perfect. In 1875 there gradually developed a singular change, the night seiznres took place at longer intervals, and day seizures took their place, until 1880, during which year no night seizures occurred, and day seizures alone occurred. It had been rare for more than two fits to take place on the same night, but four and five seizures during the day was now common. This was a serious change for the patient and her friends, and necessitated the employment of a companion to be constantly with her. It prevented her going to evening amusements, or from walking out, except after a week succeeding a fit, when this was permitted for two weeks. During this time the chances were against the patient having an attack, as there was generally about a month between the fits. As a matter of fact, during several years, only one severe attack and two three slight ones occurred, while the patient was thus allowed out. At this time a change was made in the treatment—that is in the autumn of 1883. The patient was placed on one drop of a one per cent solution of nitroglycerine in a teaspoonful of water, three times a day after meals. Bromide of soda was now given instead of potash, in a 20-grain dose, morning and evening. The nitroglycerine was increased gradually, till in six months five drops were taken. Within six months of commencing the nitroglycerine there was evidence of its doing good; the frequency of the attacks was diminished, two months elapsing between attacks, and their severity was less. Twice four months elapsed during 1888 and 1889 without a fit, and the patient and her friends were most hopeful. But in 1890 the attacks were more frequent, and the patient was discouraged. Still the nitroglycerine was continued, and once more in 1891 the attacks, though hardly less frequent, were certainly again less severe, and she seldom had more than one fit on the same day. During the time intervening between 1892 and 1897, the bromide of soda was discontinued, and a mixture of bromide of potash and sodium, with bicarbonate of potash and tincture of columba substituted. The nitroglycerine was continued at intervals, though not regularly, as the patient's stomach began to rebel and show a certain amount of irritation. In November, 1897, my attention was accidentally drawn to the benefit said to be derived in this disease from a pill of the hydrocyanate of iron manufactured by the Tilden Company, of New Lebanon, N. Y. I sent for some literature on this subject, and in January of 1898, I placed the patient on this pill, the composition of which is as follows:

℞ Hydrocyanate of iron (Tilden)..... 60 grains
Extract of hyoscyamis..... 60 grains
Mucilage, q. s.....

Divide into 120 pills, one to be given night and morning, and increased one pill every three weeks, until three pills are taken at a dose.

Within four months from commencing this remedy, a decided improvement was noticed. The patient had, during this time, only two attacks, and they were decidedly less severe, the epileptic sleep was much shorter, and the patient regained her faculties sooner. The pills were, during the last six months of 1898, increased to six daily, during which time only three fits occurred, with occasional attacks of petit mal. In 1899 she was placed on the double strength pill, commencing with three, which was practically the same dose, and was increased every two months by another pill, till five were taken. This dose the patient has continued to take night and morning ever since. During 1899 she had only five attacks. In January, 1900, she had a slight fit, and on the 21st of February she had a severe fit. From that date, up to the first of February, 1902, she was absolutely without a fit, though there was occasionally slight attacks of petit mal, but on the 2d of February, 1902, while at dinner, she was seized with an attack, which at first seemed as if it would only be a slight threatening, but it developed into a fairly severe fit, though not as severe, by any means, as those she generally took before commencing the hydrocyanate of iron. Looking back over the history of this case, which is but a mere outline of forty years, I have no hesitation, in saying that this pill has done far more for my patient than any other drug she has taken. I had hoped when I began writing this case, that I would have been able to state that she was absolutely cured of the grand mal, having been nearly two years without a fit, but the attack on February first makes it impossible. Still, when we consider that for nearly two years, she had been practically absolutely free from the disease, the influence of the hydrocyanate of iron must be admitted as being the most powerful for good in this disease.

The Radical Treatment of Ischuria, due to Prostatic Hypertrophy, by Means of Rectal Cauterization of the Prostate.—(By Dr. Angelo Negretto, in Reforma Medica.)—The author devised this method of treating hypertrophied prostates in 1895, and has since tried it in a number of cases. The present article contains the results obtained in his last series of ten cases. He prepares the patient for operation by the administration of a purgative and a mixture of bismuth and opium. An hour before the operation he administers several enemata of glycerin. General anesthesia is then administered, the patient is placed in the position used in perineal cystotomy, with elevated pelvis, and the rectum is stretched with a Weiss speculum and the upper part of the rectum is packed with gauze so as to protect the operative field. The special point for the Paquelin cautery, which the author has specially devised, and which is provided with a scale enabling the operator to control the amount of tissue destroyed, is now introduced until it reaches the middle of the rectal surface of the prostate. The extent and depth of the cauterization depend upon the size of the gland. The operation lasts, on the average, two minutes, and ten or twelve days later the catheter is withdrawn permanently and the patient urinates spontaneously. In nearly every case the method described has effected a speedy and complete cure of the hypertrophy and of the urinary obstruction, according to the author. Only

in one case was there no improvement, that of a man with an enormous prostate and severe vesical complications. The method outlined is directed especially against the congestive element of prostatic hypertrophy, and is useful particularly in those cases where this element plays a great role. It has the advantage of not interfering with the generative functions.—*Jour. Adv. Therap.*

Results Obtainable in the Treatment of Dense, Tight, Deep-lying Strictures of the Urethra (L. S. Pilcher, Annals of Surgery).—In cases of retention due to a deep stricture, prolonged efforts are not made to secure the passage of instruments. If a No. 2 or No. 3 French olive-pointed bougie does not pass readily, the bladder is aspirated and preparation made for urethrotomy, usually without a guide. A free incision is made in the perineum, and if the urethra is found to be a distorted, hardened mass of cicatricial tissue, from one-half to three-quarters of an inch may be excised and the divided ends brought together. In the majority of the cases the urethra is split along its floor and a gorget introduced into the bladder, followed by the introduction of the finger. The first joint of the index finger corresponds to about a No. 60 sound of the French scale, and dilatation short of this is not advisable. The meatus and penile urethra is cut until it admits a No. 40 sound, and a sound of that size is passed through the entire urethra into the bladder. A rubber tube of about the same size is passed through the perineal wound into the bladder and held in place by sutures passed through the sides of the wound. A packing of iodoform gauze is placed around the tube. After four days the tube is removed; sounds Nos. 36, 38 and 40 are passed in succession. The tube is not replaced, and the sounds are passed every third day for two weeks, then once a week, then at rapidly-increasing intervals—once a month, once in six months, once in twelve months. There is no theoretical reason why these old strictures should not be cured permanently, as overstretched scar tissue, as seen in ventral hernia, has no tendency to contract. Some cases which have been followed for several years show that the cure has been perfect. A high tribute is paid to the late Fessenden N. Otis, who, without question, has pointed out the way whereby in the management of the worst forms of urethral strictures a full *restitutio ad integrum* may be secured in many instances.—*Georgia Jour. of Med. and Sur.*

Ptyalism.—

℞ Tinct. myrrhae ..... ℥j
Potassii chloratis..... ʒvj
Aq. camphorae .....q.s. ad ℥xvj

M. Sig. Shake. Use as a mouth wash every two or three hours to check secretions and harden the gums in mercurial ptyalism.—*Dom. Med. News.*

Fortnightlettes

THE UNIVERSITY OF PARIS has 245 professors; of these, 76 are in the medical faculty.

THE new French law requires children to be vaccinated during their first year, again at 11 and again at 21.

THE University of Chicago is contemplating the erection of a large laboratory of anatomical purposes, the cost of which will be between $500,000 and 1,000,000.

UNIVERSITY OF NORTH CAROLINA.—It has been decided by the trustees of the University of North Carolina to establish a medical department to be located at Raleigh, the state capitol.

OF the 4801 physicians and surgeons listed in the census returns for London there are no less than 169 males and six females who are foreigners. America leading the list with 63 male physicians.

ONE of the measures adopted in the campaign against charlatanry being waged in Germany is the publication in the medical journals of descriptions of the nature of the most widely advertised quack medicines.—

TO PROTECT THE CHILDREN.—The Ohio House of Representatives has passed a bill providing that a parent or guardian who shall wilfully deprive any sick children under the age of 16 years of the services of a physician shall be fined from $10 to $100, or imprisoned for six months, or both.

AN ARGUMENT FOR COMPULSORY VACCINATION.—Small-pox is increasing in all countries, with the exception of Germany and Japan where vaccination is compulsory. During the second week in March, 22,263 cases of small-pox occurred in the United States. The corresponding week last year we had 9,406 cases. The relation between the number of deaths during the corresponding weeks was 601 this year compared to 136 for the same week last year.

WAR MORTALITY.—Surgeon-General Sternberg's report will show that of 4,919 men shot during the recent war in Cuba and the philippines, 586 were killed and 4,333 were wounded. The mortality of those struck was 11.9 per cent., or one man killed for every 7.4 wounded. This shows that the Mauser bullet was less deadly than the missiles used in the civil war. During the rebellion of 507,910 wounded there were 111,286 kilied, or one killed to to 4.56 wounded.

POLITICAL INFLUENCE OF PHYSICIANS.—There are enough physicians in every State to control medical legislation if they will only act together. Thackeray says that any woman without an actual hump can marry any man she pleases; man's safety is that women are like the beasts of the field; they do not know their own strength. The same might be said of the physicians of the country; they have not appreciated their own power. If quackery thrives and gains recognition and privilege under the law it is the fault of an inactive and unorganized medical profession.—*Journal American Medical Association.*